

## Anti-CD19 [B4] Standard Size Ab02210-23.0

This chimeric rabbit antibody was made using the variable domain sequences of the original Mouse IgG1 format, for improved compatibility with existing reagents, assays and techniques.

**Isotype and Format:** Rabbit IgG, Kappa

**Clone Number:** B4

**Alternative Name(s) of Target:** B4 antigen; B-lymphocyte antigen CD19; B-lymphocyte surface antigen B4; Differentiation antigen CD19; T-cell surface antigen Leu-12

**UniProt Accession Number of Target Protein:** P15391

**Published Application(s):** FC, IF, IHC

**Published Species Reactivity:** Human

**Immunogen:** The original antibody was generated against CD19 antigen present on human B cells.

**Specificity:** This antibody reacts with the B4 antigen present on the peripheral blood cells and lymphoid organs, on cell lines derived from normal and malignant B cells, and on tumor cells isolated from patients with B cell-derived neoplasms

**Application Notes:** This antibody is recommended to be used for the cell surface expression of the B4 antigen. It is reported that in mitogen stimulated B cells the expression of the B4 antigen increases initially with the B cell activation and then is lost with the B cell differentiation (PMID: 6408173). Conjugate of DC1 with murine and humanized versions of anti-B4 antibody was found to be potent and effective in selective killing of target cells in culture. It is also reported that the anti-B4-DC1 conjugate showed antitumor efficacy in an aggressive metastatic human B-cell lymphoma survival model in SCID mice and completely cured animals bearing large tumors (PMID: 7545085). Anti-B4 when conjugated with blocked ricin increased the antibody induced cell calcium mobilization and CD19 internalization. Modulation of CD19 induced by anti-B4 or anti-B4-bR was evaluated by indirect immunofluorescence and flow cytometry (PMID: 9310487). Anti-B4-blocked ricin (anti-B4-bR) recognizes CD19-positive cells, which includes most B-cell non-Hodgkin's lymphomas (NHLs). Phase II clinical studies of anti-B4-bR suggested that it does not actively penetrate in certain sites of the disease and is not an active agent in relapsed NHLs (PMID: 9829722)

**Antibody First Published in:** Nadler et al. B4, a human B lymphocyte-associated antigen expressed on normal, mitogen-activated, and malignant B lymphocytes. J Immunol (1983);131(1):244-50. [PMID:6408173](#)

**Note on publication:** Describes the characterization of the B cell specific B4 antigen using this antibody.

## Product Form

**Size:** 200 µg Purified antibody.

**Purification:** Protein A affinity purified

**Supplied In:** PBS with 0.02% Proclin 300.

**Storage Recommendation:** Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

**Concentration:** 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.